## PATENT ABSTRACTS OF JAPAN

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## (54) ANTIMICROBIAL AGENT FOR TREATING FIBER

CH<sub>2</sub>=CR<sub>1</sub>-CH<sub>2</sub>

N

X

CH<sub>2</sub>=CR<sub>2</sub>-CH<sub>2</sub>

R<sub>3</sub>

СН2=СП5 I СООМ (57) Abstract:

PROBLEM TO BE SOLVED: To obtain an antimicrobial agent for treating fibers capable of retaining excellent antimicrobial activities for the fibers even after repetitive washing by including a specific copolymer as an essential component therein.

SOLUTION: This antimicrobial agent for treating fibers is obtained by synthesizing a copolymer containing a monomer represented by formula I (R1 and R2 are each H or methyl; R3 and R4 are each a 1-5C alkyl; X- is an anionic residue such as a halide ion or nitrate ion) such as diallyldimethylammonium chloride and a monomer represented by formula II (R5 is H or methyl; M is H) such as (meth)acrylic acid as essential components. A fabric such as a polyester or a nylon is padded in an aqueous solution of the antimicrobial agent, squeezed and then heat-treated to insolubilize the copolymer.

Thereby, antimicrobial finishing excellent in durability is carried out.